

INORGANIC
DATA QUALITY ASSURANCE REVIEW

Site Name: Castle Drive LDFL
Site Code:
Case Number: 20226

Laboratory: AATS -- Broken Arrow, Ok.

Soil Samples: MFAP59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69.

The data package consisted of eleven soil samples analyzed for total metals.

1. Analytical Parameters: All samples were analyzed using low concentration methods.
2. Holding Times: Holding time limits were reported as not having been exceeded.
3. Calibration Verification: All initial calibration verification results were within control limits. All continuing calibration verifications were reported to be within control limits.
4. CRDL Standards: the following CRDL standards were out of control limits: antimony and selenium. Positive hits within the affected range were "j" due to CRDL standard criteria.
5. Blanks: calibration and prep blank results associated to a particular group of samples are used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Typically, if sample concentration is greater than five times a blank value that is not considered a common lab artifact, no qualification is needed. If sample concentration is greater than ten times a blank value and is considered a common lab artifact, no qualification is needed. If the reported value is less than stated above, qualifications are applied in accordance with guidance. No field blank/trip blank/rinsate blank/ were reported to be associated with this SDG. Lab blanks as follows were reported as containing contamination greater than the IDL, but less than the CRDL: aluminum, antimony, cadmium, copper, iron, lead, potassium, selenium, silver, & thallium. Results > CRQL but less than 5x the blank were affected in cadmium. Affected samples qualified as per guidance.

Some copper blanks reportedly were subject to interference which resulted in a negative value. The copper fraction was qualified as "j" in samples 64 & 69 due to this criteria.
6. Matrix Spike Recoveries: Antimony & mercury were flagged by the lab with an "N" qualifier due to %R out of control limits. The data reviewer flagged these data "j", estimated. Previous reviewers rejected antimony data due to the extremely low %R. However, since the sample result was below detection limits the data reviewer believes that a "j" for antimony samples is more appropriate.
7. Duplicates: Laboratory duplicates were flagged with "*" by the lab indicating the RPD was out of control limits. The following data were reportedly affected: aluminum, calcium, chromium, & selenium. Affected data were qualified "j". MFAP59 & 60 were reportedly field duplicates of each other. magnesium, potassium, vanadium, & zinc were qualified in samples 59 & 60 due to gross variation in sample results. Selenium sample results are qualified as estimated due to the exceedance of the control limit.

8. Laboratory Control Samples: No qualifications were performed due to LCS.
9. ICP Interference Check Sample (ICS): ICS results were within control limits.
10. ICP Serial Dilution: no qualifications were performed due to ICP serial dilution criteria.
11. Overall Assessment: Some laboratory duplicate results were out of control limits. Blank concentrations were above the IDL for some analytes. Matrix spike recoveries were low for mercury and antimony. Field duplicate results reported required qualification of some data. The lab duplicate for selenium exceeded control limits. Other technical requirements appear to have been met.

001246

INORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UG/KG
 Compiled by: FLUOR DANIEL

Inorganic Traffic No.			MFAP59		MFAP60		MFAP61		MFAP62		MFAP63		MFAP64		MFAP65	
Sample ID			SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Matrix			79.2		79.4		83.6		82.1		84.6		84.3		79.5	
Percent Solids			SS-01		SS-02		SS-03		SS-04		SS-05		SS-06		SS-07	
Location and/or Sample Description																
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
ALUMINUM	7429-90-5	INO	26200	J	38800	J	24500	J	28700	J	31300	J	14100	J	27500	J
ANTIMONY	7440-36-0	INO	4.8	UJ	4.9	J	4.5	UJ	5.4	J	4.5	UJ	4.5	UJ	4.8	UJ
ARSENIC	7440-38-2	INO	6.6		5.6		6		5.1		5.2		1.4		4.5	
BARIUM	7440-39-3	INO	205		208		261		259		215		63.5		151	
BERYLLIUM	7440-41-7	INO	1		1.2		0.83		0.95		0.93		0.53		0.92	
CADMIUM	7440-43-9	INO	0.72	B	0.81	B	0.48	U	0.62	B	0.55	B	0.73	B	0.57	B
CALCIUM	7440-70-2	INO	124000	J	15000	J	119000	J	91300	J	122000	J	75500	J	84600	J
CHROMIUM	7440-47-3	INO	23.7	J	34.9	J	22.3	J	24.5	J	29.1	J	7.3	J	28.1	J
COBALT	7440-48-4	INO	8.7		7.8		10.6		12.3		7		6.7		6.7	
COPPER	7440-50-8	INO	21.8		16.3		11.4		17.3		14.8		7.6	J	11.4	
IRON	7439-89-6	INO	17700		21400		15300		17500		16100		2470		16500	
LEAD	7439-92-1	INO	19.2		14.9		15.4		55.8		20.9		12.5		14.5	
MAGNESIUM	7439-95-4	INO	4060	J	5290	J	3610		4050		4410		6240		4130	
MANGANESE	7439-96-5	INO	874		729		995		1480		723		320		618	
MERCURY	7439-97-8	INO	0.21	J	0.13	UJ	0.15	J	0.17	J	0.12	UJ	0.13	J	0.23	J
NICKEL	7440-02-0	INO	15.9		14.8		19.2		19.2		16		17.7		13.1	
POTASSIUM	7440-09-7	INO	2600	J	4130	J	1770		2440		2640		2130		2420	
SELENIUM	7782-49-2	INO	1.4	J	2.3	J	1.4	J	1.9	J	1.4	J	0.95	UJ	1.1	J
SILVER	7440-22-4	INO	0.76	U	0.76	U	0.72	U	0.73	U	0.71	U	0.71	U	0.75	U
SODIUM	7440-23-5	INO	183		209		140		285		468		553		248	
THALLIUM	7440-28-0	INO	1.8	U	1.8	U	1.7	U	1.7	U	2.1	U	2.1	U	1.8	U
VANADIUM	7440-62-2	INO	47.4	J	65.8	J	49.2		57.5		53.3		1.4	U	52.2	
ZINC	7440-66-6	INO	55.6	J	73.7	J	41.4		79		59		74.7		45.4	
CYANIDE		INO	0.63	U	0.63	U	0.6	U	0.61	U	0.59	U	0.56	U	0.63	U

LEGEND

INO - Inorganic
 Q - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 5X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

INORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UG/KG
 Compiled by: FLUOR DANIEL

Inorganic Traffic No.			MFAP66		MFAP67		MFAP68		MFAP69					
Sample I.D.			SOIL		SOIL		SOIL		SOIL					
Matrix														
Percent Solids			78.1		82.3		71.3		79.1					
Location and or Sample Description			SS-08		SD-09		SD-10		SD-11					
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
ALUMINUM	7429-90-5	INO	32000	J	19900	J	12600	J	17200	J				
ANTIMONY	7440-36-0	INO	4.9	UJ	4.6	UJ	5.3	UJ	4.8	UJ				
ARSENIC	7440-38-2	INO	5.1		11.7		6.6		5					
BARIUM	7440-39-3	INO	145		59.4		67.6		247					
BERYLLIUM	7440-41-7	INO	1		0.77		0.38		0.54					
CADMIUM	7440-43-9	INO	0.83	B	0.49	U	0.56	U	0.63	B				
CALCIUM	7440-70-2	INO	106000	J	236000	J	220000	J	98900	J				
CHROMIUM	7440-47-3	INO	29.9	J	64.1	J	15.6	J	16.4	J				
COBALT	7440-48-4	INO	8.4		6.5		6		10.2					
COPPER	7440-50-8	INO	20.6		9.2		9.7		8.2	J				
IRON	7439-89-6	INO	19800		18900		11800		12000					
LEAD	7439-92-1	INO	15.5		15.5		14.4		15.5					
MAGNESIUM	7439-95-4	INO	5290		5190		2850		2790					
MANGANESE	7439-96-5	INO	916		378		854		947					
MERCURY	7439-97-6	INO	0.15	J	0.15	J	0.19	J	0.19	J				
NICKEL	7440-02-0	INO	14.1		14.7		14.2		15.3					
POTASSIUM	7440-09-7	INO	3270		2540		1300		1110					
SELENIUM	7782-49-2	INO	1.4	J	0.97	UJ	1.1	UJ	1	UJ				
SILVER	7440-22-4	INO	0.77	U	0.73	U	0.84	U	0.76	U				
SODIUM	7440-23-5	INO	348		733		332		355					
THALLIUM	7440-28-0	INO	1.8	U	1.7	U	2	U	1.8	U				
VANADIUM	7440-62-2	INO	56.6		66		33.2		37.1					
ZINC	7440-66-6	INO	59.6		66.4		39.8		33					
CYANIDE		INO	0.64	U	0.61	U	0.7	U	0.63	U				

LEGEND

INO - Inorganic
 Q - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 5X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

INORGANIC
DATA QUALITY ASSURANCE REVIEW

Site Name: Castle Drive LDFL
Site Code:
Case Number: 20226

Laboratory: AATS -- Broken Arrow, Ok.

Water Samples: MFAP70, 71, 72, 73, 74, 77, 78, 96.

The data package consisted of eight water samples analyzed for total metals and cyanide.

1. Analytical Parameters: All samples were analyzed using low concentration methods.
2. Holding Times: Holding time limits were reported as not having been exceeded.
3. Calibration Verification: calibration verifications were reported to be within control limits.
4. CRDL Standards: the following CRDL standards were out of control limits: silver and arsenic. Positive hits within the affected range were "j" due to CRDL standard criteria.
5. Blanks: calibration and prep blank results associated to a particular group of samples are used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Typically, if sample concentration is greater than five times a blank value that is not considered a common lab artifact, no qualification is needed. If the reported value is less than stated above, qualifications are applied in accordance with guidance. No field blank/trip blank/rinsate blank/ were reported to be associated with this SDG. Lab blanks as follows were reported as containing contamination greater than the IDL, but less than the CRDL: cadmium, lead, selenium, sodium & vanadium. Sodium in sample 78 & selenium in sample 77 and vanadium in sample 71 were qualified as per guidance.
6. Matrix Spike Recoveries: silver was flagged by the lab with an "N" qualifier due to %R out of control limits. The data reviewer flagged these data "j", estimated.
7. Duplicates: Laboratory duplicates were flagged with "*" by the lab indicating the RPD was out of control limits. The following data were reportedly affected: iron. Affected data were qualified "j". MFAP72 & 74 were reportedly field duplicates of each other. Although no gross variations were reported in the field duplicate pairs, previous data reviewers recommended the qualification of iron due to duplicate criteria.
8. Laboratory Control Samples: No qualifications were performed due to LCS.
9. ICP Interference Check Sample (ICS): ICS results were within control limits.
10. ICP Serial Dilution: manganese was qualified due to ICP serial dilution criteria.
11. Method of Standard Addition: No qualifications performed due to MSA criteria.
12. Overall Assessment: Some laboratory duplicate results were out of control limits. Blank concentrations were above the IDL for some analytes. Matrix spike recoveries were out of control

limits for silver. The lab duplicate for iron exceeded control limits. FAA analytical spikes were out of control limits for arsenic (samples 70, 71, 72, 73, 74, & 96), lead (for sample 96), selenium (for samples 78 & 96), & thallium (for samples 70, 73, & 96). Some cyanide sample were qualified as estimated because they were not properly preserved. Other technical requirements appear to have been met.

INORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
Case Number: 20266
Concentrations: UG/L
Compiled by: FLUOR DANIEL

Inorganic Traffic No.												
Sample ID		MFAP70	MFAP71	MFAP72	MFAP73	MFAP74	MFAP77	MFAP78				
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER				
Percent Solids												
Location and/or Sample Description		GW-16	GW-17	GW-14	GW-19	GW-20	GW-12	L-15				
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
ALUMINUM	7429-90-5	INO	215		202		44 U		44 U		57.6	
ANTIMONY	7440-36-0	INO	23 U		23 U		23 U		23 U		23 U	
ARSENIC	7440-38-2	INO	10.5 J		3 UJ		3 UJ		3 UJ		11 J	
BARIUM	7440-39-3	INO	90.5		76.2		47.7		70.1		46.8	
BERYLLIUM	7440-41-7	INO	1 U		1 U		1 U		1 U		1 U	
CADMIUM	7440-43-9	INO	3 U		3 U		3 U		3 U		3 U	
CALCIUM	7440-70-2	INO*	227000		184000		151000		384000		142000	
CHROMIUM	7440-47-3	INO	6.3		6.2		5 U		5 U		5 U	
COBALT	7440-48-4	INO	34		6 U		6 U		6 U		16.4	
COPPER	7440-50-8	INO	10.7		11.9		6 U		13.6		6 U	
IRON	7439-89-6	INO	9550 J		179 J		324 J		113 J		96.2 J	
LEAD	7439-92-1	INO	1 U		2.5		1 U		1 U		1 U	
MAGNESIUM	7439-95-4	INO	26800		25300		27200		44700		25700	
MANGANESE	7439-96-5	INO	2750 J		105 J		588 J		885 J		552 J	
MERCURY	7439-97-6	INO	0.2 U		0.2 U		0.2 U		0.2 U		0.2 U	
NICKEL	7440-02-0	INO	19.4		7 U		7 U		7 U		7 U	
POTASSIUM	7440-09-7	INO	1990		1510		2680		3630		2930	
SELENIUM	7782-49-2	INO	2 U		2 U		2 U		2 U		2 U	
SILVER	7440-22-4	INO	7 UJ		8.6 J		7 UJ		7 UJ		7 UJ	
SODIUM	7440-23-5	INO	73300		159000		368000		364000		351000	
THALLIUM	7440-28-0	INO	4 UJ		4 U		4 U		40 UJ		4 U	
VANADIUM	7440-62-2	INO	5 U		8.6 B		5 U		5 UJ		5 U	
ZINC	7440-66-6	INO	8.8		47		3.9		6.1		4.4	
CYANIDE		INO	10 UJ		10 UJ		10 UJ		10 UJ		10 UJ	

LEGEND

IVO - Inorganic
 Q - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 5X Blank Concentration.
 J - The associated value is an estimated quantity.
 H - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

19 - Nov - 93

INORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UG/L
 Compiled by: FLUOR DANIEL

Inorganic Traffic No.														
Sample I.D.			MFAP96											
Matrix			WATER											
Percent Solids														
Location and/or Sample Description			GW-13											
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
ALUMINUM	7429-90-5	INO	44	U										
ANTIMONY	7440-36-0	INO	23	U										
ARSENIC	7440-38-2	INO	6.2	J										
BARIUM	7440-39-3	INO	25.2											
BERYLLIUM	7440-41-7	INO	1	U										
CADMIUM	7440-43-9	INO	3	U										
CALCIUM	7440-70-2	INO	460000											
CHROMIUM	7440-47-3	INO	5	U										
COBALT	7440-48-4	INO	6	U										
COPPER	7440-50-8	INO	10.2											
IRON	7439-89-6	INO	172	J										
LEAD	7439-92-1	INO	1	UJ										
MAGNESIUM	7439-95-4	INO	144000											
MANGANESE	7439-96-5	INO	877	J										
MERCURY	7439-97-6	INO	0.2	U										
NICKEL	7440-02-0	INO	7	U										
POTASSIUM	7440-09-7	INO	11500											
SELENIUM	7782-49-2	INO	2	UJ										
SILVER	7440-22-4	INO	7	UJ										
SODIUM	7440-23-5	INO	300000											
THALLIUM	7440-28-0	INO	40	UJ										
VANADIUM	7440-62-2	INO	5	U										
ZINC	7440-66-6	INO	8.6											
CYANIDE		INO	10	UJ										

LEGEND

INO - Inorganic

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 5X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

ORGANIC
DATA QUALITY ASSURANCE REVIEW

Site Name: Castle Drive LF
Site Code:
Case Number: 20266

Laboratory: Western Research Institute -- Laramie Wy.

Soil Samples: FAA43, 44, 45, 46, 47, 48, 49, 50, 51, 52, & 53.
Water Samples: FAA54, 55, 56, 57, 58, 61, 62, & 80.

The data package consisted of eleven soil and eight water samples analyzed for volatile organics, semivolatile organics and pesticides/PCB's.

1. Analytical Parameters: samples were analyzed using multi-media, multi-concentration protocols.
2. Holding Times: Holding time limits were reported as not having been exceeded.
3. Instrument Tunings: No qualifications were performed due to instrument tuning criteria.
4. Calibration Verification: acetone exceeded QC limits for %D & %RSD. No positive hits were reported for acetone although the detection limit would be considered estimated.
5. Blanks: Field blank results associated to a particular group of samples must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Typically, if sample concentration is greater than five times a blank value that is not considered a common lab artifact, no qualification is needed. If sample concentration is greater than ten times a blank value and is considered a common lab artifact, no qualification is needed. If the reported value is less than stated above, qualifications are applied in accordance with guidance. Lab blanks for VOAs (soils) were reported as containing common lab artifacts such as acetone (5j), & 2-butanone (7j) were reported. The BNA soil blank SBLK3 reportedly contained dibutylphthalate (80j), and BEHP (81j). Qualifications in accordance with guidance were made to the affected results. No contamination was reported in the Pest/PCB blanks.
6. Matrix Spike Recoveries: No qualifications were performed due to MSD criteria.
7. Duplicates: sample FAA43 & 44; along with 58 & 56 were reported as duplicate sample pairs. No gross variations in duplicate results were reported. No qualifications were performed due to duplicate criteria.
8. SMC/Surrogates: Surrogate exceeded control limits for a variety of Pest/PCB samples; two surrogates (DCB) were out of control limits for pesticide blank PBLK01. TCX 1 recoveries were zero for eleven samples including pesticide blank PBLK02. For soil sample FAA43 DCB 1, DCB 2, & TCX 1 were all reported at 151%; the upper limit is 150%. Since there were no positive hits reported, current guidance does not call for qualifications to the pesticide data.
9. Target Compound Identification and Quantification: No qualifications performed due to compound identification and quantification.
10. General Assessment: Blanks contained some contamination. %RSD and %D were out of control

limits for acetone. Pesticide surrogate recovery were out of control limits for a variety of samples including the blank.

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA 43		FAA 44		FAA 45		FAA 46		FAA 47		FAA 48		FAA 49	
Sample I.D.			SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Matrix																
Percent Solids			77		76		81		80		83		82		78	
Location and or Sample Description			SS-01		SS-02		SS-03		SS-04		SS-05		SS-06		SS-07	
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
METHYLENE CHLORIDE	75-09-2	VOA	1	J	13	U	12	U	12	U	12	U	12	U	13	U
ACETONE	67-64-1	VOA	13	U	13	U	150	J	12	U	12	U	12	U	13	U
1,1-DICHLOROETHANE	75-34-3	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
1,2-DICHLOROETHANE	84-59-0	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
BENZENE	71-43-2	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
TOLUENE	108-88-3	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
CHLOROBENZENE	108-90-7	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
ETHYLBENZENE	104-41-4	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
XYLENE	1330-20-7	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below)

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value

UU - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise

19-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.

Sample I.D.

Matrix:

Percent Solids

Location:

and or

Sample

Description:

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	13	U	13	U	13	U	13	U
METHYLENE CHLORIDE	75-09-2	VOA	13	U	13	U	13	U	13	U
ACETONE	67-64-1	VOA	13	U	13	U	13	U	13	U
1,1 DICHLOROETHANE	75-34-3	VOA	13	U	13	U	13	U	13	U
1,2 DICHLOROETHANE	540-59-0	VOA	13	U	13	U	13	U	13	U
BENZENE	71-43-2	VOA	13	U	13	U	13	U	13	U
TOLUENE	108-88-3	VOA	13	U	13	U	13	U	13	U
CHLOROBENZENE	108-90-7	VOA	13	U	13	U	13	U	13	U
ETHYLBENZENE	104-41-4	VOA	13	U	13	U	13	U	13	U
XYLENE	1330-20-7	VOA	13	U	13	U	13	U	13	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UU - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

19-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/l
 Compiled by: Fluor Daniel, Inc.

COMPOUND NAME	CAS NO.	CLASS	Organic Traffic No.		Sample I.D.		Marix:		Percent Solids		Location:		and or		Sample		Description:	
			Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	10	U	10	U	3	J	10	U	10	U	10	U	10	U	10	U
METHYLENE CHLORIDE	75-09-2	VOA	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
ACETONE	67-64-1	VOA	10	U	10	U	2	J	10	U	10	U	10	U	10	U	10	U
1,1 DICHLOROETHANE	75-34-3	VOA	10	U	10	U	7	J	13	U	10	U	10	U	10	U	10	U
1,2 DICHLOROETHANE	540-59-0	VOA	10	U	10	U	10	U	4	J	10	U	10	U	10	U	10	U
BENZENE	71-43-2	VOA	10	U	10	U	10	U	20	U	10	U	10	U	10	U	10	U
TOLUENE	108-88-3	VOA	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
CHLOROBENZENE	108-90-7	VOA	10	U	10	U	10	U	3	J	10	U	10	U	10	U	10	U
ETHYLBENZENE	104-41-4	VOA	10	U	10	U	10	U	17	U	10	U	10	U	10	U	10	U
XYLENE	1330-20-7	VOA	10	U	10	U	10	U										

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

19-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			Sample I.D.		FAA 54		FAA 55		FAA 56	
Maric:			WATER		WATER		WATER		WATER	
Percent Solids			Location:		GW-16		GW-17		GW-14	
and or			Sample							
Description:										
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	12	U	10	U	10	U	10	U
METHYLENE CHLORIDE	75-09-2	VOA	12	U	10	U	10	U	10	U
ACETONE	67-64-1	VOA	12	U	10	U	10	U	10	U
1,1 DICHLOROETHANE	75-34-3	VOA	12	U	10	U	3	J	3	J
1,2 DICHLOROETHANE	540-59-0	VOA	12	U	10	U	10	U	10	U
BENZENE	71-43-2	VOA	12	U	10	U	2	J	10	U
TOLUENE	108-88-3	VOA	12	U	10	U	10	U	10	U
CHLOROBENZENE	108-90-7	VOA	12	U	10	U	3	J	10	U
ETHYLBENZENE	104-41-4	VOA	12	U	10	U	10	U	10	U
XYLENE	1330-20-7	VOA	12	U	10	U	10	U	10	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below)

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

19-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA 43		FAA 44		FAA 45		FAA 46		FAA 47		FAA 48		FAA 49	
Sample ID			SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Mark:			77		76		81		80		83		82		78	
Location and or Sample Description:			SS-01		SS-02		SS-03		SS-04		SS-05		SS-06		SS-07	
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	430 U		430 U		410 U		410 U		400 U		400 U		420 U	
1,4-DICHLOROBENZENE	106-46-7	ABN	430 U		430 U		410 U		410 U		400 U		400 U		420 U	
NAPHTHALENE	91-20-3	ABN	430 U		430 U		410 U		410 U		400 U		400 U		420 U	
PHENANTHRENE	85-01-8	ABN	430 U		430 U		410 U		410 U		400 U		400 U		420 U	
FLUORANTHRENE	206-44-0	ABN	430 U		430 U		410 U		180 J		400 U		400 U		420 U	
PYRENE	129-00-0	ABN	430 U		430 U		410 U		150 J		400 U		400 U		420 U	
BENZO (A)									210 J		400 U		400 U		420 U	
ANTHRACENE	56-55-3	ABN	430 U		430 U		410 U		43 J		400 U		400 U		420 U	
CHRYSENE	218-01-9	ABN	430 U		430 U		410 U		120 J		400 U		400 U		420 U	
DI-N-BUTYLPHALATE	84-74-2	ABN	430 U		430 U		410 U		410 U		400 U		400 U		430 U	
BIS (2-ETHYLHEXYL)																
PHTHALATE	117-81-7	ABN	430 U		430 U		430 U		410 U		400 U		400 U		430 U	
BENZO (B)																
FLUORANTHRENE	205-99-2	ABN	430 U		430 U		410 U		90 J		400 U		400 U		420 U	
BENZO (A) PYRENE	50-32-8	ABN	430 U		430 U		410 U		57 J		400 U		400 U		420 U	
INDENO (1,2,3-CD)																
PYRENE	193-39-5	ABN	430 U		430 U		410 U		37 J		400 U		440 U		420 U	
BENZO (G,H,I)																
PERYLENE	191-24-2	ABN	430 U		430 U		410 U		43 J		400 U		400 U		420 U	

LEGEND

VGA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 C - Analytical results Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA 50		FAA 51		FAA 52		FAA 53	
Sample ID			SOIL		SOIL		SOIL		SOIL	
Matrix			76		78		75		77	
Percent Solids			SS-08		SD-09		SD-10		SD-11	
Location and or Sample Description										
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	430 U		420 U		440 U		430 U	
1,4-DICHLOROBENZENE	106-46-7	ABN	430 U		420 U		440 U		430 U	
NAPHTHALENE	91-20-3	ABN	430 U		420 U		440 U		430 U	
PHENANTHRENE	85-01-8	ABN	430 U		420 U		56 J		430 U	
FLUORANTHRENE	206-44-0	ABN	430 U		420 U		130 J		430 U	
PYRENE	129-00-0	ABN	430 U		420 U		94 J		430 U	
BENZO (A)										
ANTHRACENE	56-55-3	ABN	430 U		420 U		47 J		430 U	
CHRYSENE	218-01-9	ABN	430 U		420 U		74 J		430 U	
DI-N-BUTYLPHALATE	84-74-2	ABN	430 U		610 U		560 U		490 U	
BIS (2-ETHYLHEXYL)										
PHTHALATE	117-81-7	ABN	430 U		420 U		520 U		2700	
BENZO (B)										
FLUORANTHENE	205-99-2	ABN	430 U		420 U		100 J		430 U	
BENZO (A) PYRENE	50-32-8	ABN	430 U		420 U		56 J		430 U	
INDENO (1,2,3-CD)										
PYRENE	193-39-5	ABN	430 U		420 U		19 J		430 U	
BENZO (G,H,I)										
PERYLENE	191-24-2	ABN	430 U		420 U		45 J		430 U	

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

19-Nov-83

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20286
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA 57		FAA 58		FAA 61		FAA 62		FAA 80	
Sample ID			WATER		WATER		WATER		WATER		WATER	
Percent Solids			GW-19		GW-20		GW-12		L-15		GW-13	
Location and/or Sample Description												
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	10 U		10 U		10 U		10 U		10 U	
1,4-DICHLOROBENZENE	106-46-7	ABN	10 U		10 U		10 U		10 U		10 U	
NAPHTHALENE	91-20-3	ABN	10 U		10 U		10 U		10 U		10 U	
PHENANTHRENE	85-01-6	ABN	10 U		10 U		10 U		0.6 J		10 U	
FLUORANTHRENE	206-44-0	ABN	10 U		10 U		10 U		10 U		10 U	
PYRENE	129-00-0	ABN	10 U		10 U		10 U		10 U		10 U	
BENZO (A)			10 U		10 U		10 U		10 U		10 U	
ANTHRACENE	56-55-3	ABN	10 U		10 U		10 U		10 U		10 U	
CHRYSENE	218-01-9	ABN	10 U		10 U		10 U		10 U		10 U	
DI-N-BUTYLPHALATE	84-74-2	ABN	10 U		2 J		10 U		10 U		10 U	
BIS (2-ETHYLHEXYL)												
PHTHALATE	117-81-7	ABN	2 J		2 J		0.8 J		1 J		2 J	
BENZO (B)												
FLUORANTHRENE	205-99-2	ABN	10 U		10 U		10 U		10 U		10 U	
BENZO (A) PYRENE	50-32-8	ABN	10 U		10 U		10 U		10 U		10 U	
INDENO (1,2,3-CD)												
PYRENE	193-39-5	ABN	10 U		10 U		10 U		10 U		10 U	
BENZO (G,H,I)												
PERYLENE	191-24-2	ABN	10 U		10 U		10 U		10 U		10 U	

LEGEND

VOA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UU - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\Library\Biomane

001261

19-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			Sample I.D.					
Matrix			FAA 54	FAA 55	FAA 56			
Percent Solids			WATER	WATER	WATER			
Location, and or Sample Description			GW-16	GW-17	GW-14			
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	8	J	6	J	10	U
1,4-DICHOLOBENZENE	106-46-7	ABN	3	J	10	U	10	U
NAPHTHALENE	91-20-3	ABN	10	U	10	U	10	U
PHENANTHRENE	85-01-8	ABN	10	U	10	U	10	U
FLUORANTHRENE	206-44-0	ABN	10	U	10	U	10	U
PYRENE	129-00-0	ABN	10	U	10	U	10	U
BENZO (A)								
ANTHRACENE	56-55-3	ABN	10	U	10	U	10	U
CHRYSENE	218-01-9	ABN	10	U	10	U	10	U
DI-N-BUTYLPHALATE	84-74-2	ABN	10	U	10	U	2	J
BIS (2-ETHYLHEXYL)								
PHTHALATE	117-81-7	ABN	10	U	2	J	1	J
BENZO (B)								
FLUORANTHENE	205-99-2	ABN	10	U	10	U	10	U
BENZO (A) PYRENE	50-32-8	ABN	10	U	10	U	10	U
INDENO (1,2,3-CD)								
PYRENE	193-39-5	ABN	10	U	10	U	10	U
BENZO (G,H,I)								
PERYLENE	191-24-2	ABN	10	U	10	U	10	U

LEGEND

VOA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UU - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise

H:\Directory\Bename

001262

19-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			Sample I.D.		FAA 43	FAA 44	FAA 45	FAA 46	FAA 47	FAA 48	FAA 49	
Mark:			SOIL		77	76	81	80	83	82	78	
Percent Solids			SS-01		SS-02	SS-03	SS-04	SS-05	SS-06	SS-07		
Location:												
and/or												
Sample												
Description:												
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
CO2 BACKGROUND	RT 0.75	TIC	4600	J B								
CO2 BACKGROUND	RT 1.24	TIC	25	J B						1000	J B	
CO2 BACKGROUND	RT 1.39	TIC	18	J B								15 J
CO2 BACKGROUND	RT 0.74	TIC			3700	J B	3700	J B				
CO2 BACKGROUND	RT 1.23	TIC			20	J B						
CO2 BACKGROUND	RT 1.40	TIC			12	J B				34	J B	
POSSIBLE C10H18	RT 20.27	TIC			7	J						
CO2 BACKGROUND	RT 1.25	TIC										
CO2 BACKGROUND	RT 1.33	TIC					11	J B	42	J B		
CO2 BACKGROUND	RT 0.72	TIC					12	J B				
CO2 BACKGROUND	RT 1.36	TIC							2900	J B		
CO2 BACKGROUND	RT 1.45	TIC							26	J B		
CO2 BACKGROUND	RT 1.44	TIC								19	J B	
CO2 BACKGROUND	RT 0.71	TIC									10	J
CO2 BACKGROUND	RT 1.35	TIC										3000 J B
												10 J B

LEGEND

VOA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 C - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
 TIC - Tentatively Identified Compound

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
Case Number: 20266
Concentrations: ug/kg
Compiled by: Fluor Daniel, Inc.

[illegible]

LEGEND

VOA - Volatile Organic Analysis
ABN - Acid/Base Neutral (semi-volatiles)
PEST - Pesticides/PCB Analysis
Q - Analytical results' Qualifier (listed below).
B - Analyte was detected above the CRDL but below 10X Blank Concentration.
J - The associated value is an estimated quantity.
R - Data for analyte is unusable.
UJ - The material was analyzed for but was not detected above the level of the associated value.
UDJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
T/C - Tentatively Identified Compound

10-May-00

CHEMICAL DATA SUMMARY

Organic Traffic No.			FAA 33 ROL	FAA 34 ROL	FAA 35 ROL	FAA 36 ROL	FAA 37 ROL	FAA 38 ROL	FAA 39 ROL
Compound Name	CAS NO	CLASS	Concentration G	Concentration G	Concentration G	Concentration G	Concentration G	Concentration G	Concentration G
P-33 CHLORINATED	RT 2.11	YC	112 J						
P-33 CARBONIC ACID	RT 2.28	YC	272 J	340 J	300 J	360 J	380 J	360 J	410 J
P-33 CHLORINATED	RT 11.28	YC	340 J	360 J	340 J	330 J	46 J	370 J	380 J
P-33 CHLORINATED	RT 12.42	YC	1580 J	1580 J	1580 J	1580 J	1780 J	1780 J	1990 J
P-33 CHLORINATED	RT 12.55	YC	340 J	130 J					
P-33 CHLORINATED	RT 13.30	YC	170 J						
P-33 CHLORINATED	RT 17.37	YC	84 J						
P-33 CHLORINATED	RT 18.15	YC	360 J	290 J	300 J	360 J	340 J	370 J	
P-33 CHLORINATED	RT 24.81	YC	240 J	230 J					
P-33 CHLORINATED	RT 26.40	YC	260 J	130 J	260 J	200 J			
P-33 CHLORINATED	RT 28.74	YC	130 J	130 J			210 J		
P-33 CHLORINATED	RT 29.25	YC	130 J	94 J	130 J	360 J		130 J	270 J
P-33 CHLORINATED	RT 29.98	YC	2200 J	1190 J			170 J		
P-33 CHLORINATED	RT 32.05	YC			89 J		110 J		
P-33 CHLORINATED	RT 36.54	YC			1000 J			90 J	
P-33 CHLORINATED	RT 38.83	YC			110 J			130 J	
P-33 CHLORINATED	RT 41.98	YC			130 J		97 J	89 J	
P-33 CHLORINATED	RT 26.28	YC				100 J	120 J	540 J	
P-33 CHLORINATED	RT 26.56	YC				710 J			
P-33 CHLORINATED	RT 26.18	YC				130 J	120 J		
P-33 CHLORINATED	RT 22.08	YC				84 J			
P-33 CHLORINATED	RT 24.67	YC				6400 J			
P-33 CHLORINATED	RT 26.28	YC				100 J	200 J		
P-33 CHLORINATED	RT 26.56	YC				130 J			
P-33 CHLORINATED	RT 26.18	YC					110 J		
P-33 CHLORINATED	RT 26.71	YC					170 J		
P-33 CHLORINATED	RT 26.82	YC					92 J	88 J	
P-33 CHLORINATED	RT 26.82	YC						130 J	

LEGEND

LEGEND
 VDA = Volatile Organic Analysis
 ADR = Acid/Alkali (non-volatile)
 PEST = Pesticides/PCBs analysis
 R = Analytical result/ Qualifier (listed below)
 B = Analysis was detected above the CREL, but below 10X Blank Concentration.
 * = The associated value is an estimated quantity.
 N = Data for analysis is unavailable.
 U = The material was analyzed for but was not detected above the level of the associated value.
 D = The test result was undetectable, but after not detected, the associated value is an estimate and may be inaccurate or imprecise.
 TC = TENTATIVELY IDENTIFIED COMPOUND

19-Nov-93

ORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UG/KG
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA50		FAA51		FAA52		FAA53					
Sample I.D.			SOIL		SOIL		SOIL		SOIL					
Matrix														
Percent Solids			78		78		75		77					
Location			SS-08		SD-09		SD-10		SD-11					
and or Sample Description														
COMPOUND NAME	CAS/SCAN NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
POSS OXY COMP	5.93	TIC	120 J.B		110 J.B		200 J.B		150 J.B					
POSS ACID OR ESTER	7.32	TIC	530 J.B		540 J.B		1400 J.B		1100 J.B					
POSS OXY COMP	11.2	TIC	520 J.B		740 J.B		680 J.B		560 J.B					
UNK PHTHALATE	14.12	TIC	2000 J.B		1900 J.B		1900 J.B		1200 J.B					
POSS CARBOXYLIC OR	19.01	TIC	320 J.B		1200 J		480 J		3900 J.B					
PHOSPHINE OXIDE	19.84/791-28-8	TIC	100 J		130 J		120 J		140 J					
POSS OXY AROMATIC	24.87	TIC	3200 J		110 J		780 J		230 J					
POSS OXY COMP	25.04	TIC	310 J											
D-THOMOPREGNAN	32318-95-9	TIC	130 J											
D-STEROSTEROL	25.56	TIC			120 J		240 J		510 J					
POSS OXY COMP MW	25.96	TIC	280 J				220 J							
POSS OXY COMP MW	26.45	TIC	260 J											
UNK	26.7	TIC	140 J		120 J		120 J		1200 J					
POSS CHLOR HYDRO	2.03	TIC			100 J									
POSS CARBOXY ACID	10.90	TIC					120 J							
POSS DIENE OR	19.93	TIC					93 J							
C25H52 ALKANE	22.79	TIC					170 J							
C29H54 ALKANE	24.15	TIC					140 J							
POSS OXY COMP	25.99	TIC					160 J							
POSS DIENE OR OXY	15.72	TIC							89 J					
POSS OXY AROMATIC	16.37	TIC							95 J					
POSS OXY	26.25	TIC							120 J					

LEGEND

VCA - Volatile Organic Analysis
 AB/N - Acid - Base/Neutral Analysis (Semi-volatiles)
 Pesti/PCB - Pesticide/Polychlorinated Biphenyl Analysis
 TIC - Tentatively Identified Compound
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\Directory\Name

001266

0 0 1 2 6 7

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL

Case Number: 20266

Concentrations: ug/L

Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			
Sample I.D.	FAA 54	FAA 55	FAA 56
Matrix:	WATER	WATER	WATER
Percent Solids			
Location:	GW-16	GW-17	GW-14
and or			
Sample			
Description:			

[illegible]

LEGEND

VOA – Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q – Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U – The material was analyzed for but was not detected above the level of the associated value.

U – The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

TIC— Tentatively Identified Compound

19-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.

Sample ID

Matrix

Percent Solids

Location:

and or

Sample

Description:

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
C02 BACKGROUND	RT 0.65	TIC	250	JB					12	JB		
C02 BACKGROUND	RT 0.69	TIC	78	JB								
METHANE	75-71-8				18	JB						
DICHLORODIFLUOR	RT 0.77	TIC	23	JB			22	JB	36	JB		
C02 BACKGROUND	RT.66	TIC			300	JB	140	JB				
C02 BACKGROUND	RT 0.48	TIC					5	J				
C02 BACKGROUND	RT 0.59	TIC					44	J				
C02 BACKGROUND	RT.70	TIC					79	JB				
C02 BACKGROUND	RT 0.68	TIC									2600	JB

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

WJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

TIC - Tentatively Identified Compound

ORGANIC CHEMICAL DATA SUMMARY

09-Dec-93

Site Name and Code: FLUOR DANIEL
Case Number: 20266
Concentrations: UG/L
Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			Sample ID						
Sample ID			FAA54	FAA55	FAA56	FAA57	FAA58	FAA61	FAA62
Matrix			WATER	WATER	WATER	WATER	WATER	WATER	WATER
Location and or Sample Description			GW-16	GW-17	GW-14	GW-19	GW-20	GW-12	L-15
COMPOUND NAME	CAS/SCAN NO.	CLASS	Concentration Q	Concentration Q	Concentration Q	Concentration Q	Concentration Q	Concentration Q	Concentration Q
POSS OXY COMP	3.78	TIC	3 J						
PHOSPHONIC ACID	54543-03-02	TIC	3 J					5 J	
POSS ACID OR ESTER	5.37	TIC	6 J	4 J					
POSS ALKENE	6.85	TIC	5 J	4 J					
POSS CARBOXYLIC ACID	7.37	TIC	3 J						4 J
UNK	15.23	TIC	2 J		3 J	6 J	2 J	4 J	
POSS CARBOXYLIC ACID	16.89	TIC	26 J	4 J					2 J
UNK	24.99	TIC	3 J						
UNK	5.85	TIC					9 J		
POSS OXYGENATED	11.19	TIC		5 J			26 J		
POSS OXYGENATED	11.27	TIC		2 J					
POSS OXYGENATED	15.74	TIC		8 J					
POSS CARBOXYLIC ACID	16.30	TIC		6 J			2 J		
POSS CARBOXYLIC ACID	16.86	TIC		2 J		4 J			
POSS CARBOXYLIC ACID	16.86	TIC		4 J					
POSS CARBOXYLIC ACID	11.04	TIC				3 J			
UNK	11.93	TIC				8 J			
C14H30 ALKANE	12.48	TIC				2 J		2 J	
C15H32 ALKANE	13.56	TIC				2 J		3 J	
C16H34 ALKANE	14.60	TIC				3 J	2 J	3 J	
POSS CARBOXYLIC	17.60	TIC				2 J		3 J	
PHENOL 4,4'-BUTYLID	85-60-9 21.41	TIC				7 J	3 J	12 J	
UNK	24.8	TIC				5 J			
POSS OXYGENATED	28.11	TIC				4 J	22 J		
						3 J	5 J		

LEGEND

VOA - Volatile Organic Analysis
AB/N - Acid - Base/Neutral analysis (Semi-volatiles)
Pest/PCB - Pesticide/Polychlorinated Biphenyl analysis
TIC - Tentatively Identified Compound
Q - Analytical results' Qualifier (listed below)
B - Analyte was detected above the CRDL but below 10X Blank Concentration.
J - The associated value is an estimated quantity.
R - Data for analyte is unusable
U - The material was analyzed for but was not detected above the level of the associated value.
UD - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\chemistry\fluor

001209

19-Nov-93

ORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UG/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			Sample ID		FAA57		FAA58		FAA62		FAA80					
Sample Mark			WATER		WATER		WATER		WATER		WATER					
Percent Solids																
Location and or Sample Description			GW-19		GW-20		L-15		GW-13							
COMPOUND NAME	CAS/SCAN NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
POSS OXYGENATED	22.00	TIC	10	J												
POSS CARBOXYLIC	23.37	TIC	4	J												
POSS CARBOXYLIC	15.79	TIC	2	J												
C21H36 ALKANE	15.56	TIC			2	J										
UNK POSS MIXTURE	14.72	TIC							5	J						
9-OCTADECENAMIDE	21.99	TIC							3	J						
POSS OXYGENATED	2.91	TIC									5	J				
POSS OXYGENATED	3.54	TIC									9	J				
POSS OXYGENATED	3.79	TIC									44	J				
POSS OXYGENATED	3.91	TIC									2	J				
PHOS ACI DIETHYL	598-02-7 5.2	TIC									3	J				

LEGEND

VOA - Volatile Organic Analysis
 AB/N - Acid - Base/Neutral analysis (Semi-volatiles)
 Pest/PCB - Pesticide/Polychlorinated Biphenyl analysis
 TIC - Tentatively Identified Compound
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration
 J - The associated value is an estimated quantity
 R - Data for analyte is unusable
 U - The material was analyzed for but was not detected above the level of the associated value
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\actory\Name

001270

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDRILL
 Case Number: 20286
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA 43		FAA 44		FAA 45		FAA 46		FAA 47		FAA 48		FAA 49	
Sample I.D.			SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Mark:			77		78		81		80		83		82		78	
Percent Solids			SS-01		SS-02		SS-03		SS-04		SS-05		SS-06		SS-07	
Location and/or Sample Description:																
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
METHYLENE CHLORIDE	75-09-2	VOA	1	J	13	U	12	U	12	U	12	U	12	U	13	U
ACETONE	67-64-1	VOA	13	U	13	U	150	J	12	U	12	U	12	U	13	U
1,1-DICHLOROETHANE	75-34-3	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
1,2-DICHLOROETHANE	840-59-0	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
BENZENE	71-43-2	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
TOLUENE	108-88-3	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
CHLOROBENZENE	108-90-7	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
ETHYLBENZENE	104-41-4	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U
XYLENE	1330-20-7	VOA	13	U	13	U	12	U	12	U	12	U	12	U	13	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL

Case Number: 20266

Concentrations: ug/kg

Compiled by: Fluor Daniel, Inc.

Organic Traffic No.				
Sample I.D.	FAA 50	FAA 51	FAA 52	FAA 53
Matrix	SOIL	SOIL	SOIL	SOIL
Percent Solids	76	78	75	77
Location: and or Sample Description:	SS-08	SD-09	SD-10	SD-11

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	13	U	13	U	13	U	13	U
METHYLENE CHLORIDE	75-09-2	VOA	13	U	13	U	13	U	1	J
ACETONE	67-64-1	VOA	13	U	13	U	13	U	13	U
1,1 DICHLOROETHANE	75-34-3	VOA	13	U	13	U	13	U	13	U
1,2 DICHLOROETHANE	540-59-0	VOA	13	U	13	U	13	U	13	U
BENZENE	71-43-2	VOA	13	U	13	U	13	U	13	U
TOLUENE	108-88-3	VOA	13	U	13	U	13	U	13	U
CHLOROBENZENE	108-90-7	VOA	13	U	13	U	13	U	13	U
ETHYLBENZENE	104-41-4	VOA	13	U	13	U	13	U	13	U
XYLENE	1330-20-7	VOA	13	U	13	U	13	U	13	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA 43		FAA 44		FAA 45		FAA 46		FAA 47		FAA 48		FAA 49	
Sample I.D.			SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Matrix:			77		76		81		80		83		82		78	
Percent Solids:			SS-01		SS-02		SS-03		SS-04		SS-05		SS-06		SS-07	
Location:																
and or																
Sample																
Description:																
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	430	U	430	U	410	U	410	U	400	U	400	U	420	U
1,4-DICHLOROBENZENE	106-46-7	ABN	430	U	430	U	410	U	410	U	400	U	400	U	420	U
NAPHTHALENE	81-20-3	ABN	430	U	430	U	410	U	410	U	400	U	400	U	420	U
PHENANTHRENE	85-01-8	ABN	430	U	430	U	410	U	180	J	400	U	400	U	420	U
FLUORANTHRENE	206-44-0	ABN	430	U	430	U	410	U	150	J	400	U	400	U	420	U
PYRENE	129-00-0	ABN	430	U	430	U	410	U	210	J	400	U	400	U	420	U
BENZO (A)																
ANTHRACENE	56-55-3	ABN	430	U	430	U	410	U	43	J	400	U	400	U	420	U
CHRYSENE	218-01-9	ABN	430	U	430	U	410	U	120	J	400	U	400	U	420	U
DI-N-BUTYLPHALATE	84-74-2	ABN	430	U	430	U	410	U	410	U	400	U	400	U	430	U
BIS (2-ETHYLHEXYL)																
PHTHALATE	117-81-7	ABN	430	U	430	U	430	U	410	U	400	U	400	U	430	U
BENZO (B)																
FLUORANTHENE	205-99-2	ABN	430	U	430	U	410	U	90	J	400	U	400	U	420	U
BENZO (A) PYRENE	50-32-8	ABN	430	U	430	U	410	U	57	J	400	U	400	U	420	U
INDENO (1,2,3-CD)																
PYRENE	193-39-5	ABN	430	U	430	U	410	U	37	J	400	U	440	U	420	U
BENZO (G,H,I)																
PERYLENE	191-24-2	ABN	430	U	430	U	410	U	43	J	400	U	400	U	420	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below)

B - Analyte was detected above the CRDL but below 10X Blank Concentration

J - The associated value is an estimated quantity

R - Data for analyte is unreliable

U - The material was analyzed for but was not detected above the level of the associated value

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise

08-Dec-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20286
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.

Sample ID

Matrix

Percent Solids

Location

and or

Sample

Description

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	430	U	420	U	440	U	430	U
1,4-DICHLOROBENZENE	106-46-7	ABN	430	U	420	U	440	U	430	U
NAPHTHALENE	91-20-3	ABN	430	U	420	U	440	U	430	U
PHENANTHRENE	85-01-8	ABN	430	U	420	U	440	U	430	U
FLUORANTHRENE	206-44-0	ABN	430	U	420	U	56	J	430	U
PYRENE	129-00-0	ABN	430	U	420	U	130	J	430	U
BENZO (A)			430	U	420	U	94	J	430	U
ANTHRACENE	56-55-3	ABN	430	U	420	U				
CHRYSENE	218-01-9	ABN	430	U	420	U	47	J	430	U
DI-N-BUTYLPHALATE	84-74-2	ABN	430	U	420	U	74	J	430	U
BIS (2-ETHYLHEXYL)			430	U	610	U	560	U	460	U
PHTHALATE	117-81-7	ABN	430	U	420	U				
BENZO (B)			430	U	420	U	520	U	2700	
FLUORANTHENE	205-99-2	ABN	430	U	420	U				
BENZO (A) PYRENE	50-32-8	ABN	430	U	420	U	100	J	430	U
INDENO (1,2,3-CD)			430	U	420	U	56	J	430	U
PYRENE	193-39-5	ABN	430	U	420	U				
BENZO (G,H,I)			430	U	420	U	49	J	430	U
PERYLENE	191-24-2	ABN	430	U	420	U	45	J	430	U

LEGEND

VOA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 Q - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 LW - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\Site\081275

001275

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/kg
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			Sample I.D.		FAA 43		FAA 44		FAA 45		FAA 46		FAA 47		FAA 48		FAA 49	
Material			SOIL		77		78		81		80		83		82		79	
Location:			SS-01		SS-02		SS-03		SS-04		SS-05		SS-06		SS-07			
and or																		
Sample																		
Description:																		
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
CO2 BACKGROUND	RT 0.75	TIC	4800	J B														
CO2 BACKGROUND	RT 1.24	TIC	25	J B											1000	J B		
CO2 BACKGROUND	RT 1.36	TIC	18	J B													15	J B
CO2 BACKGROUND	RT 0.74	TIC																
CO2 BACKGROUND	RT 1.23	TIC			3700	J B			3700	J B								
CO2 BACKGROUND	RT 1.40	TIC			20	J B									34	J B		
POSSIBLE C10H16	RT 20.27	TIC			7	J												
CO2 BACKGROUND	RT 1.25	TIC																
CO2 BACKGROUND	RT 1.33	TIC							11	J B			42	J B				
CO2 BACKGROUND	RT 0.72	TIC							12	J B								
CO2 BACKGROUND	RT 1.36	TIC											2900	J B				
CO2 BACKGROUND	RT 1.45	TIC											26	J B				
CO2 BACKGROUND	RT 1.44	TIC													19	J B		
CO2 BACKGROUND	RT 0.71	TIC															10	J
CO2 BACKGROUND	RT 1.35	TIC															3000	J B
																	10	J B

LEGEND

VOA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unreliable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
 TIC - Tentatively Identified Compound

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
Case Number: 20206
Concentrations: ug/kg
Compiled by: Fluor Daniel, Inc.

[illegible]

LEGEND

VOA - Volatile Organic Analysis
ABN - Acid/Base Neutral (semi-volatiles)
PEST - Pesticides/PCB Analysis
Q - Analytical results' Qualifier (listed below).
B - Analyte was detected above the CRDL but below 10X Blank Concentration.
J - The associated value is an estimated quantity.
R - Data for analyte is unusable.
U - The material was analyzed for but was not detected above the level of the associated value.
LJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
TIC - Tentatively Identified Compound

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
Case Number: 20398
Concentrations: ug/kg
Compiled by: Fluor Daniel, Inc.

[illegible]

LEAD

YOA = Yields Organic Analysis

ABN = Acid-Base Neutral Equivalent

PEST – PesticidesPCB Analysis

Q - Analyzed results? Qualifier (photo-closed)

B – Analyte was detected above the OPOC, but above 10X Blank Concentration

J = The associated value is an estimated value

R – Data for results is unavailable

U = The material was unaltered for but was not detected above the level of the associated value

UJ – The material was analyzed for hydrocarbons only. The associated value is an estimate and may be inaccurate or incomplete.

TE = RELATIVELY ENRICHED COMPOUND

17-Nov-93

ORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20296
 Concentrations: UG/KG
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA50		FAA51		FAA52		FAA53					
Sample I.D.			SOIL		SOIL		SOIL		SOIL					
Maric														
Percent Solids			76		78		75		77					
Location:			SS		SD-09		SD-10		SD-11					
and or														
Sample														
Description:														
COMPOUND NAME	CAS/SCAN NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
POSS OXY COMP	5.93	TIC	120 J B		110 J B		200 J B		150 J B					
POSS ACID OR ESTER	7.32	TIC	530 J B		540 J B		1400 J B		1100 J B					
POSS OXY COMP	11.2	TIC	520 J B		740 J B		680 J B		560 J B					
UNK PHTHALATE	14.12	TIC	2000 J B		1900 J B		1900 J B		1200 J B					
POSS CARBOXYLIC OR	18.01	TIC	320 J B		1200 J		480 J		3900 J B					
PHOSPHINE OXIDE	19.94/791-28-8	TIC	100 J		130 J		120 J		140 J					
POSS OXY AROMATIC	24.87	TIC	3200 J		110 J		780 J		230 J					
POSS OXY COMP	25.04	TIC	310 J											
D-HOMOPREGNAN	32318-95-9	TIC	130 J											
G-SITOSTEROL	25.56	TIC	280 J		120 J		240 J		510 J					
POSS OXY COMP MW	25.98	TIC	260 J				220 J							
POSS OXY COMP MW	26.45	TIC	260 J											
UNK	26.7	TIC	140 J		120 J		120 J		1200 J					
POSS CHLOR HYDRO	2.03	TIC			100 J									
POSS CARBOXY ACID	10.90	TIC					120 J							
POSS DIENE OR	19.93	TIC					93 J							
C25H52 ALKANE	22.79	TIC					170 J							
C28H54 ALKANE	24.15	TIC					140 J							
POSS OXY COMP	25.99	TIC					180 J							
POSS DIENE OR OXY	15.72	TIC												
POSS OXY AROMATIC	16.37	TIC							89 J					
POSS OXY	26.25	TIC							95 J					
									120 J					

LEGEND

VOA - Volatile Organic Analysis
 AB/N - Acid - Base/Neutral analysis (Semi-volatiles)
 Pest/PCB - Pesticide/Polychlorinated Biphenyl analysis
 TIC - Tentatively Identified Compound
 Q - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analysis is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\data\ryl\B0012

001279

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			
Sample I.D.	FAA 54	FAA 55	FAA 56
Matrix	WATER	WATER	WATER
Percent Solids			
Location:	GW-16	GW-17	GW-14
and or Sample Description:			

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	12	U	10	U	10	U
METHYLENE CHLORIDE	75-09-2	VOA	12	U	10	U	10	U
ACETONE	67-64-1	VOA	12	U	10	U	3	J
1,1 DICHLOROETHANE	75-34-3	VOA	12	U	3	J	10	U
1,2 DICHLOROETHANE	540-59-0	VOA	12	U	10	U	10	U
BENZENE	71-43-2	VOA	12	U	2	J	10	U
TOLUENE	108-88-3	VOA	12	U	10	U	10	U
CHLOROBENZENE	108-90-7	VOA	12	U	3	J	10	U
ETHYLBENZENE	104-41-4	VOA	12	U	10	U	10	U
XYLENE	1330-20-7	VOA	12	U	10	U	10	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/l
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.

Sample I.D.

Matrix:

Percent Solids

Location:

and or

Sample

Description:

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
VINYL CHLORIDE	75-01-4	VOA	10 U		10 U		3 J		10 U		10 U	
METHYLENE CHLORIDE	75-09-2	VOA	10 U		10 U		10 U		10 U		10 U	
ACETONE	67-64-1	VOA	10 U		10 U		10 U		10 U		10 U	
1,1 DICHLOROETHANE	75-34-3	VOA	10 U		10 U		10 U		10 U		10 U	
1,2 DICHLOROETHANE	540-59-0	VOA	10 U		10 U		2 J		10 U		10 U	
BENZENE	71-43-2	VOA	10 U		10 U		7 J		10 U		10 U	
TOLUENE	108-88-3	VOA	10 U		10 U		10 U		13 U		10 U	
CHLOROBENZENE	108-90-7	VOA	10 U		10 U		10 U		4 J		10 U	
ETHYLBENZENE	104-41-4	VOA	10 U		10 U		10 U		20		10 U	
XYLENE	1330-20-7	VOA	10 U		10 U		10 U		10 U		10 U	
									3 J		10 U	
									17		10 U	

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\directry\filename

001281

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20206
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.						
Sample I.D.			FAA 54	FAA 55	FAA 56	
Matrix			WATER	WATER	WATER	
Percent Solids						
Location: GW-16				GW-17	GW-14	
and or						
Sample						
Description:						
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	8	J	8	J
1,4-DICHLOROBENZENE	106-46-7	ABN	3	J	10	U
NAPHTHALENE	91-20-3	ABN	10	U	10	U
PHENANTHRENE	85-01-8	ABN	10	U	10	U
FLUORANTHRENE	208-44-0	ABN	10	U	10	U
PYRENE	129-00-0	ABN	10	U	10	U
BENZO (A)						
ANTHRACENE	56-55-3	ABN	10	U	10	U
CHRYSENE	218-01-9	ABN	10	U	10	U
DI-N-BUTYLPHALATE	84-74-2	ABN	10	U	10	U
BIS (2-ETHYLHEXYL)						
PHTHALATE	117-81-7	ABN	10	U	2	J
BENZO (B)						
FLUORANTHRENE	205-99-2	ABN	10	U	10	U
BENZO (A) PYRENE	50-32-8	ABN	10	U	10	U
INDENO (1,2,3-CD)						
PYRENE	193-39-5	ABN	10	U	10	U
BENZO (G,H,I)						
PERYLENE	191-24-2	ABN	10	U	10	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

17 - Nov - 93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20286
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.	FAA 57	FAA 58	FAA 61	FAA 62	FAA 80
Sample ID	WATER	WATER	WATER	WATER	WATER
Matrix					
Percent Solids					
Location	GW-19	GW-20	GW-12	L-15	GW-13
and or					
Sample					
Description:					

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
PHENOL	91-20-3	ABN	10	U	10	U	10	U	10	U	10	U
1,4-DICHLOROBENZENE	106-46-7	ABN	10	U	10	U	10	U	10	U	10	U
NAPHTHALENE	91-20-3	ABN	10	U	10	U	10	U	0.6	J	10	U
PHENANTHRENE	85-01-8	ABN	10	U	10	U	10	U	10	U	10	U
FLUORANTHRENE	206-44-0	ABN	10	U	10	U	10	U	10	U	10	U
PYRENE	129-00-0	ABN	10	U	10	U	10	U	10	U	10	U
BENZO (A)												
ANTHRACENE	56-55-3	ABN	10	U	10	U	10	U	10	U	10	U
CHRYSENE	218-01-9	ABN	10	U	10	U	10	U	10	U	10	U
DI-N-BUTYLPHALATE	84-74-2	ABN	10	U	2	J	10	U	10	U	10	U
BIS (2-ETHYLHEXYL)												
PHTHALATE	117-81-7	ABN	2	J	2	J	0.6	J	1	J	2	J
BENZO (B)												
FLUORANTHRENE	205-99-2	ABN	10	U	10	U	10	U	10	U	10	U
BENZO (A) PYRENE	50-32-8	ABN	10	U	10	U	10	U	10	U	10	U
INDENO (1,2,3-CD)												
PYRENE	193-39-5	ABN	10	U	10	U	10	U	10	U	10	U
BENZO (G,H,I)												
PERYLENE	191-24-2	ABN	10	U	10	U	10	U	10	U	10	U

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\data\93\011283

001283

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			
Sample I.D.	FAA54	FAA55	FAA56
Matrix	WATER	WATER	WATER
Percent Solids			
Location	GW-16	GW-17	GW-14
and or Sample Description:			

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q
CO2 BACKGROUND	RT 0.65	TIC	410	J B				
METHANE -	75-71-8							
DICHLORODIFLUORO	RT 0.78	TIC	22	J B	25	J B	20	J B
HYDRAZINE-	1741-01-1							
TRIMETHYL-OR-ISO	RT 2.19	TIC	5	J				
CO2 BACKGROUND	RT 0.65	TIC			420	J B		
CO2 BACKGROUND	RT 0.70	TIC			220	J B		
CO2 BACKGROUND	RT 0.69	TIC					43	J B

LEGEND

VOA - Volatile Organic Analysis

ABN - Acid/Base Neutral (semi-volatiles)

PEST - Pesticides/PCB Analysis

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 10X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

LJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

TIC- Tentatively Identified Compound

17-Nov-93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			
Sample I.D.	FAA54	FAA55	FAA56
Matrix	WATER	WATER	WATER
Percent Solids			
Location:	GW-16	GW-17	GW-14
and/or Sample - Description:			

COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q
CO2 BACKGROUND	RT 0.65	TIC	410	J B				
METHANE -	75-71-8							
DICHLORODIFLUORO	RT 0.78	TIC	22	J B	25	J B	20	J B
HYDRAZINE -	1741-01-1							
TRIMETHYL-OR-ISO	RT 2.19	TIC	5	J				
CO2 BACKGROUND	RT 0.65	TIC			420	J B		
CO2 BACKGROUND	RT 0.70	TIC			220	J B		
CO2 BACKGROUND	RT 0.69	TIC					43	J B

LEGEND

VOA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
 TIC - Tentatively Identified Compound

H:\directory\Werna.m

001285

17 - Nov - 93

CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LANDFILL
 Case Number: 20266
 Concentrations: ug/L
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA 57		FAA 58		FAA 61		FAA 62		FAA 80	
Sample I.D.			WATER		WATER		WATER		WATER		WATER	
Matrix:			GW 19		GW-20		GW-12		L-15		GW-13	
Percent Solids												
Location:												
and or												
Sample												
Description:												
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
C02 BACKGROUND	RT 0.65	TIC	250	J B					12	J B		
C02 BACKGROUND	RT 0.69	TIC	78	J B								
METHANE-	75-71-8				18	J B						
DICHLORODIFLUOR	RT 0.77	TIC	23	J B			22	J B	36	J B		
C02 BACKGROUND	RT.66	TIC			300	J B	140	J B				
C02 BACKGROUND	RT 0.48	TIC					5	J				
C02 BACKGROUND	RT 0.59	TIC					44	J				
C02 BACKGROUND	RT.70	TIC					79	J B				
C02 BACKGROUND	RT 0.68	TIC									2600	J B

LEGEND

VOA - Volatile Organic Analysis
 ABN - Acid/Base Neutral (semi-volatiles)
 PEST - Pesticides/PCB Analysis
 Q - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
 TIC - Tentatively Identified Compound

H:\directory\l\name

0 0 1 2 8 6

08-Dec-93

ORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: FLUOR DANIEL
 Case Number: 20266
 Concentrations: UGL
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			FAA54		FAA55		FAA56		FAA57		FAA58		FAA61		FAA62	
Sample ID			WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Percent Solids																
Location:			GW-16		GW-17		GW-14		GW-19		GW-20		GW-12		L-15	
- and or																
Sample																
Description																
COMPOUND NAME	CAS/SCAN NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
POSS OXY COMP	3.78	TIC	3 J								5 J					
PHOSPHONIC ACID	54543-03-02	TIC	3 J		4 J											
POSS ACID OR ESTER	5.37	TIC	6 J		4 J											
POSS ALKENE	6.85	TIC	5 J										4 J			
POSS CARBOXYLIC ACID	7.37	TIC	3 J				3 J		6 J		2 J		4 J			
UNK	15.23	TIC	2 J												2 J	
POSS CARBOXYLIC ACID	16.89	TIC	26 J		4 J						9 J					
UNK	24.99	TIC	3 J								26 J					
UNK	5.85	TIC			5 J											
POSS OXYGENATED	11.19	TIC			2 J											
POSS OXYGENATED	11.27	TIC			8 J						2 J					
POSS OXYGENATED	15.74	TIC			6 J											
POSS CARBOXYLIC ACID	16.30	TIC			2 J				4 J							
POSS CARBOXYLIC ACID	16.86	TIC			4 J											
POSS CARBOXYLIC ACID	18.06	TIC					3 J									
POSS CARBOXYLIC ACID	11.04	TIC					8 J									
UNK	11.93	TIC					2 J									
C14H30 ALKANE	12.48	TIC					2 J				2 J					
C15H32 ALKANE	13.56	TIC					3 J		2 J		3 J					
C16H34 ALKANE	14.60	TIC					2 J				3 J					
POSS CARBOXYLIC	17.60	TIC					7 J		3 J							
PHENOL 4,4'-BUTYLID	85-60-9 21.41	TIC					5 J				12 J					
UNK	24.8	TIC					4 J		22 J							
POSS OXYGENATED	26.11	TIC					3 J		5 J							

LEGEND

VOA - Volatile Organic Analysis
 AB/N - Acid - Base/Neutral analysis (Semi-volatiles)
 Pest/PCB - Pesticide/Polychlorinated Biphenyl analysis
 TIC - Tentatively Identified Compound
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 10X Blank Concentration
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\lab\dr\jlb\sum

001287

17-Nov-93

ORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UGL
 Compiled by: Fluor Daniel, Inc.

Organic Traffic No.			Sample I.D.		FAA57		FAA58		FAA62		FAA60					
Marb:			WATER		WATER		WATER		WATER		WATER					
Percent Solids																
Location:			GW-19		GW-20		L-15		GW-13							
and or																
Sample																
Description																
COMPOUND NAME	CAS/SCAN NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
POSS OXYGENATED	22.00	TIC	10 J													
POSS CARBOXYLIC	23.37	TIC	4 J													
POSS CARBOXYLIC	15.79	TIC	2 J													
C21H36 ALKANE	15.56	TIC			2 J											
UNK POSS MIXTURE	14.72	TIC					5 J									
9-OCTADECENAMIDE	21.99	TIC					3 J									
POSS OXYGENATED	2.91	TIC							5 J							
POSS OXYGENATED	3.54	TIC							9 J							
POSS OXYGENATED	3.79	TIC							44 J							
POSS OXYGENATED	3.91	TIC							2 J							
PHOS ACI DIETHYL	598-02-7 5.2	TIC							3 J							

LEGEND

VOA - Volatile Organic Analysis
 AB/N - Acid - Base/Neutral analysis (Semi-volatiles)
 Pest/PCB - Pesticide/Polychlorinated Biphenyl analysis
 TIC - Tentatively Identified Compound
 Q - Analytical results' Qualifier (listed below).
 B - Analyte was detected above the CRDL but below 10X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

H:\data\p11\p11a.doc

001288

08-Dec-83

INORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20268
 Concentrations: UG/L
 Compiled by: FLUOR DANIEL

Inorganic Traffic No.

Sample I.D.

Matrix:

Percent Solids:

Location:

and/or

Sample

Description:

COMPOUND NAME	CAS NO.	CLASS	Concentration Q	Concentration Q	Concentration Q	Concentration Q	Concentration Q	Concentration Q	Concentration Q	Concentration Q
ALUMINUM	7429-90-5	INO	215	202	44 U	44 U	57.6	227	44 U	
ANTIMONY	7440-36-0	INO	23 U	23 U	23 U	23 U	23 U	23 U	23 U	
ARSENIC	7440-38-2	INO	10.5 J	3 UJ	3 UJ	3.6 J	5 UJ	11 J	3 U	
BARIUM	7440-39-3	INO	90.5	76.2	47.7	70.1	46.8	771	7 U	
BERYLLIUM	7440-41-7	INO	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
CADMIUM	7440-43-9	INO	3 U	3 U	3 U	3 U	3 U	3 U	3 U	
CHROMIUM	7440-47-3	INO	227000	184000	151000	384000	142000	150000	169 U	
COBALT	7440-48-4	INO	6.3	6.2	5 U	5 U	5 U	5 U	5 U	
COPPER	7440-50-8	INO	34	6 U	6 U	6 U	6 U	16.4	6 U	
IRON	7439-89-6	INO	10.7	11.9	6 U	13.6	6 U	10.4	6 U	
LEAD	7439-92-1	INO	9550 J	179 J	324 J	113 J	96.2 J	814 J	6 UJ	
MAGNESIUM	7439-95-4	INO	1 U	2.5	1 U	1 U	1 U	4	1 U	
MANGANESE	7439-96-5	INO	26800	25300	27200	44700	25700	13100	171 U	
MERCURY	7439-97-6	INO	2250 J	105 J	558 J	885 J	552 J	1230 J	1 UJ	
NICKEL	7440-02-0	INO	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
POTASSIUM	7440-09-7	INO	19.4	7 U	7 U	7 U	7 U	61.2	7 U	
SELENIUM	7782-49-2	INO	1990	1510	2680	3630	2930	1750	248 U	
SILVER	7440-22-4	INO	2 U	2 U	2 U	2 U	2 U	2.1 UJ	2 UJ	
SODIUM	7440-23-5	INO	7 UJ	8.6 J	7 UJ	7 UJ	7 UJ	7 UJ	7 UJ	
THALLIUM	7440-28-0	INO	73300	159000	368000	364000	351000	78700	2220 UJ	
Vanadium	7440-62-2	INO	4 UJ	4 U	4 U	40 UJ	4 U	4 U	4 U	
ZINC	7440-66-8	INO	5 U	6.6 B	5 U	5 U	5 U	21.4	5 U	
CYANIDE		INO	6.6	47	3.9	6.1	4.4	16	2 U	
			10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	

LEGEND

INO - Inorganic

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below 5X Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

06-Dec-93

INORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UQ/KG
 Compiled by: FLUOR DANIEL

Inorganic Traffic No.			MFAP59		MFAP60		MFAP61		MFAP62		MFAP63		MFAP64		MFAP65	
Sample I.D.			SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Marb:			79.2		79.4		83.6		82.1		84.6		84.3		79.5	
Percent Solids			SS-01		SS-02		SS-03		SS-04		SS-05		SS-06		SS-07	
Location:																
end/or																
Sample																
Description:																
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
ALUMINUM	7429-90-5	INO	26200	J	36800	J	24500	J	28700	J	31300	J	14100	J	27500	J
ANTIMONY	7440-36-0	INO	4.8	UJ	4.9	J	4.5	UJ	5.4	J	4.5	UJ	4.5	UJ	4.8	UJ
ARSENIC	7440-38-2	INO	6.6		5.6		6		5.1		5.2		4.5		4.5	
BARUM	7440-39-3	INO	205		208		261		259		215		63.5		151	
BERYLLIUM	7440-41-7	INO	1		1.2		0.83		0.95		0.83		0.93		0.92	
CADMIUM	7440-43-9	INO	0.72	B	0.81	B	0.48	U	0.62	B	0.55	B	0.73	B	0.57	B
CALCIUM	7440-70-2	INO	124000	J	15000	J	119000	J	91300	J	122000	J	75500	J	84600	J
CHROMIUM	7440-47-3	INO	23.7	J	34.9	J	22.3	J	24.5	J	29.1	J	7.3	J	28.1	J
COBALT	7440-48-4	INO	8.7		7.6		10.6		12.3		7		6.7		6.7	
COPPER	7440-50-8	INO	21.6		16.3		11.4		17.3		14.8		7.6	J	11.4	
IRON	7439-89-6	INO	17700		21400		15300		17500		18100		2470		16500	
LEAD	7439-92-1	INO	19.2		14.9		15.4		55.8		20.9		12.5		14.5	
MAGNESIUM	7439-95-4	INO	4060	J	5290	J	3610		4050		4410		6240		4130	
MANGANESE	7439-96-5	INO	874		729		995		1480		723		320		618	
MERCURY	7439-97-8	INO	0.21	J	0.13	UJ	0.15	J	0.17	J	0.12	UJ	0.13	J	0.23	J
NICKEL	7440-02-0	INO	15.9		14.8		19.2		19.2		16		17.7		13.1	
POTASSIUM	7440-09-7	INO	2600	J	4130	J	1770		2440		2640		2130		2420	
SELENIUM	7782-49-2	INO	1.4	J	2.3	J	1.4	J	1.9	J	1.4	J	0.95	UJ	1.1	J
SILVER	7440-22-4	INO	0.76	U	0.76	J	0.72	U	0.73	U	0.71	U	0.71	U	0.75	U
SODIUM	7440-23-5	INO	183		209		140		265		468		553		246	
THALIUM	7440-28-0	INO	1.8	U	1.8	U	1.7	U	1.7	U	2.1	U	2.1	U	1.8	U
VANADIUM	7440-62-2	INO	47.4	J	65.8	J	49.2		57.5		53.3		1.4	U	52.2	
ZINC	7440-66-6	INO	55.6	J	73.7	J	41.4		79		59		74.7		46.4	
CYANIDE		INO	0.63	U	0.63	U	0.6	U	0.61	U	0.59	U	0.59	U	0.63	U

LEGEND

INO - Inorganic
 Q - Analytical results' Qualifier (listed below)
 B - Analyte was detected above the CRDL but below 5X Blank Concentration.
 J - The associated value is an estimated quantity.
 R - Data for analyte is unusable.
 U - The material was analyzed for but was not detected above the level of the associated value.
 UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

Site Name and Code: CASTLE DRIVE LDFL
Case Number: 20266
Concentrations: UG/KG
Compiled by: FLUOR DANIEL

Sample I.D.

Mark:

Percent Solids

Location:

and or

Sample

Description:

COMPOUND NAME	CAS NO.	CLASS	Description											
			Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
ALUMINUM	7429-90-5	INO	32000	J	19900	J	12600	J	17200	J				
ANTIMONY	7440-36-0	INO	4.6	UJ	4.6	UJ	5.3	UJ	4.8	UJ				
ARSENIC	7440-38-2	INO	5.1		11.7		6.6		5					
BARIUM	7440-39-3	INO	145		69.4		87.6		247					
BERYLLIUM	7440-41-7	INO	-1		0.77		0.38		0.54					
CADMIUM	7440-43-9	INO	0.63	B	0.49	U	0.56	U	0.63	B				
CALCIUM	7440-70-2	INO	106000	J	236000	J	220000	J	98900	J				
CHROMIUM	7440-47-3	INO	29.9	J	64.1	J	15.6	J	16.4	J				
COBALT	7440-48-4	INO	8.4		5.5		6		10.2					
COPPER	7440-50-8	INO	20.6		9.2		9.7		8.2	J				
IRON	7439-89-6	INO	19800		18900		11800		12000					
LEAD	7439-92-1	INO	15.5		15.5		14.4		15.5					
MAGNESIUM	7439-95-4	INO	5290		5190		2850		2790					
MANGANESE	7439-96-5	INO	916		378		854		947					
MERCURY	7439-97-6	INO	0.15	J	0.15	J	0.19	J	0.13	J				
NICKEL	7440-02-0	INO	14.1		14.7		14.2		15.3					
POTASSIUM	7440-09-7	INO	3270		2540		1300		1110					
SELENIUM	7782-49-2	INO	1.4	J	0.97	UJ	1.1	UJ	1	UJ				
SILVER	7440-22-4	INO	0.77	U	0.73	U	0.84	U	0.76	U				
SODIUM	7440-23-5	INO	348		733		332		355					
THALLIUM	7440-28-0	INO	1.8	U	1.7	U	2	U	1.8	U				
VANADIUM	7440-62-2	INO	56.6		66		33.2		37.1					
ZINC	7440-66-8	INO	59.6		66.4		39.8		33					
CYANIDE		INO	0.64	U	0.61	U	0.7	U	0.63	U				

LEGEND

INO – Inorganic

Q – Analytical results' Qualifier (listed below)

B - Analyte was detected above the CRDL but below 5X Blank Concentration.

J – The associated value is an estimated quantity.

R - Data for analyte is unusable.

U – The material was analyzed for but was not detected above the level of the associated value.

UJ – The material was analyzed but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

17-Nov-83

INORGANIC CHEMICAL DATA SUMMARY

Site Name and Code: CASTLE DRIVE LDFL
 Case Number: 20266
 Concentrations: UG/L
 Compiled by: FLUOR DANIEL

Inorganic Traffic No.														
Sample I.D.			MFAP96											
Matrix:			WATER											
Percent Solids														
Location and or Sample Description:			GW-13											
COMPOUND NAME	CAS NO.	CLASS	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
ALUMINUM	7429-90-5	INO	44	U										
ANTIMONY	7440-36-0	INO	23	U										
ARSENIC	7440-38-2	INO	6.2	J										
BARUM	7440-39-3	INO	25.2											
BERYLLIUM	7440-41-7	INO	1	U										
CADMIUM	7440-43-9	INO	3	U										
CALCIUM	7440-70-2	INO	460000											
CHROMIUM	7440-47-3	INO	5	U										
COBALT	7440-48-4	INO	6	U										
COPPER	7440-50-8	INO	10.2											
IRON	7439-89-6	INO	172	J										
LEAD	7439-92-1	INO	1	UJ										
MAGNESIUM	7439-95-4	INO	144000											
MANGANESE	7439-96-5	INO	877	J										
MERCURY	7439-97-6	INO	0.2	U										
NICKEL	7440-02-0	INO	7	U										
POTASSIUM	7440-09-7	INO	11500											
SELENIUM	7782-49-2	INO	2	UJ										
SILVER	7440-22-4	INO	7	UJ										
SODIUM	7440-23-5	INO	300000											
THALLIUM	7440-28-0	INO	40	UJ										
VANADIUM	7440-62-2	INO	5	U										
ZINC	7440-66-6	INO	8.6											
CYANIDE		INO	10	UJ										

LEGEND

INO - Inorganic

Q - Analytical results' Qualifier (listed below).

B - Analyte was detected above the CRDL but below SX Blank Concentration.

J - The associated value is an estimated quantity.

R - Data for analyte is unusable.

U - The material was analyzed for but was not detected above the level of the associated value.

UJ - The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

INORGANIC
DATA QUALITY ASSURANCE REVIEW

Site Name: Castle Drive LDFL
Site Code:
Case Number: 20226
Laboratory: AATS -- Broken Arrow, Ok.
Water Samples: MFAP70, 71, 72, 73, 74, 77, 78, 96.

The data package consisted of eight water samples analyzed for total metals and cyanide.

1. Analytical Parameters: All samples were analyzed using low concentration methods.
2. Holding Times: Holding time limits were reported as not having been exceeded.
3. Calibration Verification: calibration verifications were reported to be within control limits.
4. CRDL Standards: the following CRDL standards were out of control limits: silver and arsenic. Positive hits within the affected range were "j" due to CRDL standard criteria.
5. Blanks: calibration and prep blank results associated to a particular group of samples are used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Typically, if sample concentration is greater than five times a blank value that is not considered a common lab artifact, no qualification is needed. If the reported value is less than stated above, qualifications are applied in accordance with guidance. No field blank/trip blank/rinsate blank/ were reported to be associated with this SDG. Lab blanks as follows were reported as containing contamination greater than the IDL, but less than the CRDL: cadmium, lead, selenium, sodium & vanadium. Sodium in sample 78 & selenium in sample 77 and vanadium in sample 71 were qualified as per guidance.
6. Matrix Spike Recoveries: silver was flagged by the lab with an "N" qualifier due to %R out of control limits. The data reviewer flagged these data "j", estimated.
7. Duplicates: Laboratory duplicates were flagged with "***" by the lab indicating the RPD was out of control limits. The following data were reportedly affected: iron. Affected data were qualified "j". MFAP72 & 74 were reportedly field duplicates of each other. Although no gross variations were reported in the field duplicate pairs, previous data reviewers recommended the qualification of iron due to duplicate criteria.
8. Laboratory Control Samples: No qualifications were performed due to LCS.
9. ICP Interference Check Sample (ICS): ICS results were within control limits.
10. ICP Serial Dilution: manganese was qualified due to ICP serial dilution criteria.
11. Method of Standard Addition: No qualifications performed due to MSA criteria.
12. Overall Assessment: Some laboratory duplicate results were out of control limits. Blank concentrations were above the IDL for some analytes. Matrix spike recoveries were out of

control limits for silver. The lab duplicate for iron exceeded control limits. FAA analytical spikes were out of control limits for arsenic (samples 70, 71, 72, 73, 74, & 96), lead (for sample 96), selenium (for samples 78 & 96), & thallium (for samples 70, 73, & 96). Some cyanide sample were qualified as estimated because they were not properly preserved. Other technical requirements appear to have been met.

001294

INORGANIC
DATA QUALITY ASSURANCE REVIEW

Site Name: Castle Drive LDFL
Site Code:
Case Number: 20226

Laboratory: AATS -- Broken Arrow, Ok.

Soil Samples: MFAP59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69.

The data package consisted of eleven soil samples analyzed for total metals.

1. Analytical Parameters: All samples were analyzed using low concentration methods.
2. Holding Times: Holding time limits were reported as not having been exceeded.
3. Calibration Verification: All initial calibration verification results were within control limits. All continuing calibration verifications were reported to be within control limits.
4. CRDL Standards: the following CRDL standards were out of control limits: antimony and selenium. Positive hits within the affected range were "j" due to CRDL standard criteria.
5. Blanks: calibration and prep blank results associated to a particular group of samples are used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Typically, if sample concentration is greater than five times a blank value that is not considered a common lab artifact, no qualification is needed. If sample concentration is greater than ten times a blank value and is considered a common lab artifact, no qualification is needed. If the reported value is less than stated above, qualifications are applied in accordance with guidance. No field blank/trip blank/rinsate blank/ were reported to be associated with this SDG. Lab blanks as follows were reported as containing contamination greater than the IDL, but less than the CRDL: aluminum, antimony, cadmium, copper, iron, lead, potassium, selenium, silver, & thallium. Results > CRQL but less than 5x the blank were affected in cadmium. Affected samples qualified as per guidance.

Some copper blanks reportedly were subject to interference which resulted in a negative value. The copper fraction was qualified as "j" in samples 64 & 69 due to this criteria.

6. Matrix Spike Recoveries: Antimony & mercury were flagged by the lab with an "N" qualifier due to %R out of control limits. The data reviewer flagged these data "j", estimated. Previous reviewers rejected antimony data due to the extremely low %R. However, since the sample result was below detection limits the data reviewer believes that a "j" for antimony samples is more appropriate.
7. Duplicates: Laboratory duplicates were flagged with "*" by the lab indicating the RPD was out of control limits. The following data were reportedly affected: aluminum, calcium, chromium, & selenium. Affected data were qualified "j". MFAP59 & 60 were reportedly field duplicates of each other. magnesium, potassium, vanadium, & zinc were qualified in samples 59 & 60 due to gross variation in sample results. Selenium sample results are qualified as estimated due to the exceedance of the control limit.

8. Laboratory Control Samples: No qualifications were performed due to LCS.
9. ICP Interference Check Sample (ICS): ICS results were within control limits.
10. ICP Serial Dilution: no qualifications were performed due to ICP serial dilution criteria.
11. Overall Assessment: Some laboratory duplicate results were out of control limits. Blank concentrations were above the IDL for some analytes. Matrix spike recoveries were low for mercury and antimony. Field duplicate results reported required qualification of some data. The lab duplicate for selenium exceeded control limits. Other technical requirements appear to have been met.